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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/567,660

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Suzanne Chamberland

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EXAMINER

TRUONG, TAMTHOM NGO

ART UNIT

PAPER NUMBER

1624

MAIL DATE

DELIVERY MODE

12/12/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/567,660	<b>Applicant(s)</b> CHAMBERLAND ET AL.	
	<b>Examiner</b> TAMTHOM N. TRUONG	<b>Art Unit</b> 1624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4,7,9-12,18-25,29,31,39 and 43-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,7,9-12,18,19,29,31,39,43 and 45-49 is/are rejected.
- 7) ☒ Claim(s) 20-25 and 44 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/20/07</u> .   | 6) <input type="checkbox"/> Other: _____                          |

### FINAL ACTION

Applicant's amendment of 9-20-07 has been fully considered. The amended claims have overcome the previous rejections of 112/2<sup>nd</sup> paragraph, and 102 based on **Hermann** (DE'280). However, they necessitate new ground of rejection. Also, applicant's argument has not overcome the 112/1<sup>st</sup> paragraph for the term "aryl", thus, said rejection is maintained.

Claims 3, 5, 6, 8, 13-17, 26-28, 30, 32-38 and 40-42 are cancelled.

Claims 1, 2, 4, 7, 9-12, 18-25, 29, 31, 39 and 43-49 are pending.

#### ***Claim Rejections - 35 USC § 112, First Paragraph***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

1. **Scope of Enablement:** Claims 1, 2, 4, 7, 9-12, 18-25, 29, 31, 39 and 43 remain rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for making and using compounds wherein R<sub>1</sub> or R<sub>2</sub> is *phenyl* or *hydroxyphenyl* group, does not reasonably provide enablement for making and using compounds wherein R<sub>1</sub> or R<sub>2</sub> is another ring embraced in the definition of "aryl" or "substituted" derivatives recited for R<sub>2</sub> which is virtually non-limiting for many of the moieties described in the specification. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly

connected, to make and use the invention commensurate in scope with these claims. The rejection is maintained for the reasons stated in the previous action, and for the following ones:

- a. The references cited by applicants do not really show the bio-equivalency between *phenyl* and many heteroaryl groups. Even if they did, the data on a few compounds shown in the specification would not be sufficient to be extrapolated to the broad range of compounds of formula (1.0).
- b. There is no reasonable basis for assuming that the myriad of compounds embraced by the broader generic claims will all share the same physiological properties since they are so structurally dissimilar as to be chemically equivalent and there is no basis in the prior art for assuming the same. Note, **In re Surrey** 151 USPQ 724 regarding sufficiency of disclosure for a Markush group. Also see MPEP 2164.03 for enablement requirements in cases directed to structure-sensitive arts such as the pharmaceutical art. It is well established that “the scope of enablement varies inversely with the degree of unpredictability of the factors involved”, and physiological activity is generally considered to be unpredictable. See **In re Fisher** 166 USPQ

Note that in *University of Rochester v. G.D. Searle & Co.*, 68 USPQ 2d. 1424 at 1438, the screening for over 600 compounds was deemed to be undue. Applicant’s scope far exceeds this number.

Therefore, it is maintained that, for the unduly broad scope of the term “**aryl**” for R<sub>1</sub> or R<sub>2</sub>, undue experimentation is inevitable.

2. **New Matter:** Claims 45-49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 45-49 recite species that are not described in the specification in term of preparation, or a preferred embodiment.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4, 11, 29, 31 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Hermann et. al.** (DE'280 – previously cited). Although compound #16 of DE'280 no longer anticipates in view of the proviso, it remains an obvious variant since it differs only at R<sub>1</sub> and R<sub>2</sub>. Note, the reference also teaches *hydroxyalkyl* groups on the amino group at the 4-position which would correspond to the instant R<sub>1</sub> as an *alkyl* group substituted by one to three hydroxyl. Furthermore, the proviso in claim 1 does not appear to exclude a "substituted

alkyl" group. Therefore, at the time of the invention it would have been obvious to make and use some compounds of the instant formula (1.0) in view of the teaching above.

### *Claim Objections*

4. Claims 20-25 and 44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Said claims recite species with the combination of substituents that are not taught or fairly suggested by the prior art of record.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TAMTHOM N. TRUONG whose telephone number is (571)272-0676. The examiner can normally be reached on M, T and Th (9:00-5:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tamthom N. Truong/

***Tamthom N. Truong***  
***Examiner***  
***Art Unit 1624***

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12-4-07